Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-22 are pending in the application, with 1, 5, 6, 10, 12, and 16 being the independent claims. Claims 1, 2, 4-7, 12, 13, 16, and 17 are sought to be amended without prejudice to or disclaimer of the subject matter therein. New claims 18-22 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Information Disclosure Statement

In the Office Action, the Examiner requested Applicant to resubmit certain documents that are cited in an Information Disclosure Statement filed on March 17, 2000, but are not in the case file. Paper No. 7, page 2. Applicant hereby re-submits the missing documents for the Examiner's review and consideration. Applicant, therefore, respectfully requests withdrawal of any objections and reconsideration of the aforementioned Information Disclosure Statement.

In the Office Action, the Examiner acknowledges receipt of an Information Disclosure Statement filed on August 21, 2001, including the documents cited therein. The Examiner, however, has not indicated whether he has considered this Information Disclosure Statement. Applicant respectfully requests consideration by the Examiner.

Objections to the Drawings

The objections stipulated in Form PTO 948, dated January 2, 2003, have been

noted. Pursuant to 37 C.F.R. § 1.111(b), Applicant respectfully requests that these

objections be held in abeyance until allowable subject matter is indicated since a reply to

the objections is not necessary for further consideration of the claims.

Objections to the Claims

In the Office Action, the Examiner objected to claim 5 for having a misnumbered

limitation. Paper No. 7, page 4. In light of the foregoing claim amendments, Applicant

believes this objection is no longer valid and/or has been rendered moot. As such,

Applicant respectfully requests reconsideration and withdrawal of the Examiner's

objection to claim 5, and allowance thereof.

Rejections under 35 U.S.C. § 112, First Paragraph

In the Office Action, the Examiner rejected claims 4, 16, and 17 under 35 U.S.C.

§ 112, first paragraph. Paper No. 7, page 3. First, with respect to claims 16-17, the

Examiner argues that claims 16 and 17 are indefinite. Applicant assumes that the

Examiner intended to reject claims 16 and 17 under 35 U.S.C. § 112, second paragraph.

Therefore, Examiner's rejections pertaining to indefiniteness are addressed below.

The Examiner also rejected claims 4, 16, and 17 for allegedly failing to point out

how to distinctly make the invention. Although claims 4, 16, and 17 have been amended

to more particularly point out and distinctly claim the present invention, Applicant

respectfully disagrees notwithstanding the proposed amendments. Referring to page 15,

lines 3-27, Applicant describes an embodiment for implementing a redundancy routine

that transmits a check sequence data packet at regularly scheduled packet intervals.

Applicant further describes that the interval duration can be altered to reach a desired

tradeoff between loss and bandwidth conservation. In other words, increasing the

interval reduces the likelihood of packet loss, but increases the required bandwidth.

Conversely, decreasing the interval may increase the likelihood of packet loss, but would

decrease the required bandwidth. The selected interval depends on the network

conditions desired by the user.

Therefore, Applicant respectfully requests reconsideration and withdrawal of the

Examiner's rejections of claims 4, 16, and 17, and allowance thereof.

Rejections under 35 U.S.C. § 112, Second Paragraph

In the Office Action, the Examiner rejected claims 4, 5, 16, and 17 under 35

U.S.C. § 112, second paragraph, as allegedly being indefinite. Paper No. 7, pages 3-4.

Applicant believes the Examiner's rejections are no longer valid and/or have been

rendered moot by the proposed amendments. As such, Applicant respectfully requests

reconsideration and withdrawal of the Examiner's rejections of claims 4, 5, 16, and 17,

and allowance thereof.

Rejections under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1-17 under 35 U.S.C.

§ 103, as allegedly being obvious in view of the following documents:

(1)   U.S. Patent 6,389,038 B1 to Goldberg *et al.*, issued May 14, 2002

        (herein referred to as "Goldberg");

(2)   U.S. Patent 6,438,105 B1 to Qarni *et al.*, issued August 20, 2002

        (herein referred to as "Qarni"); and

(3)   U.S. Patent 6,438,606 B1 to Borella *et al.*, issued August 13, 2002

        (herein referred to as "Borella").

a.   *Claims 1-4, 6-9, and 12-15*

First, the Examiner rejected claims 1-4, 6-9, and 12-15 as allegedly being obvious

over Goldberg in view of Qarni. See Paper No. 7, pages 4-5. Applicant has amended

independent claims 1, 6, and 12 to more particularly point out and distinctly claim the

present invention. As discussed below, Applicant believes the rejections of claims 1-4,

6-9, and 12-15 are no longer valid and/or have been rendered moot by the proposed

amendment. In particular, Goldberg describes a method and system for combining plural

independently addressable packets into a SuperPacket. The method and system reduce

the percentage of the header information that is redundant between packets and/or

redundant based on the source and destination addresses of the packets as compared to

the data payload. The combined SuperPackets are disassembled at a terminating gateway

or at a second multiplexer. (See Abstract.)

However, Goldberg's SuperPacket does not include "information for

synchronizing a current channel state at an originating gateway with a record of said

channel state at the terminating gateway," as recited in claims 1, 6, and 12. Goldberg's

SuperPacket contains control bytes that indicate the number of regular packets that are

consolidated in the SuperPacket for each channel. See Col. 4, lines 51-60. Goldberg

does not teach or suggest that its control bytes are used to produce or maintain a record at

its terminating gateway. Goldberg also does not teach or suggest that its control bytes

provides any indication of the current state of the channels at its originating gateway.

Therefore, Applicant respectfully submits that Goldberg does not teach or suggest

each and every element or limitation of claims 1, 6, and 12. Claims 2-4, 7-9, and 13-15

depend from claims 1, 6, and 12, respectively. Therefore, the dependent claims are

patentable over Goldberg for at least the reasons stated above, in addition to the

additional elements, and/or features cited therein.

Qarni does not cure the deficiencies of Goldberg, and likewise does not teach or

suggest each and every feature of claims 1, 6, and 12. The Examiner has cited Qarni to

allegedly teach handling loss of data in a UDP data environment. However, Qarni does

not teach or suggest, inter alia, synchronizing channel states, as discussed above.

Therefore, Qarni, taken alone or in combination with Goldberg, does not teach or suggest

claims 1, 6, and 12. Since claims 2-4, 7-9, and 13-15 depend from claims 1, 6, and 12,

respectively, Qarni likewise does not teach or suggest the dependent claims.

Accordingly, Applicant does not believe that Goldberg and Qarni, alone or taken

together, teaches or suggests each and every element or limitation of the claimed

invention. Applicant respectfully requests reconsideration and withdrawal of the

Examiner's rejection of claims 1-4, 6-9, and 12-15, and allowance thereof.

b.   *Claims 5, 10, and 11*

The Examiner has rejected claims 5, 10, and 11 as allegedly being obvious over

Qarni in view of Goldberg. Applicant respectfully traverses this rejection.

Qarni describes a facsimile transmission protocol and method for transmission of

facsimile data over an IP network. The protocol features error correction through the use

of a retransmission of packets with a flow-control window and a dynamic redundancy

window which alters the number of redundant frames that are transmitted in the packet.

The size of the dynamic redundancy window expands or contracts depending on the

behavior and quality of the IP network, for example whether it exhibits choppy,

error-causing characteristics. (See Abstract.)

Qarni does not teach or suggest "transmitting a check sequence data packet," as

recited in claims 5 and 10. Qarni describes that a UDP checksum can be built into a

datagram, or a frame check sequence can be appended as a field 114 at the end of each

packet. Col. 10, lines 59-67. Contrary to the Examiner's assertions, Qarni does not

teach or suggest that a separate check sequence packet is transmitted after every four

packets. Figure 10 of Qarni clearly shows that a 16 bit frame check sequence is a distinct

field 114 appended to a data packet, and is not sent as a separate packet.

Qarni also does not teach or suggest a parity system as recited in claims 5 and 11.

Therefore, Applicant respectfully submits that Qarni does not teach or suggest each and

every element or limitation of claims 5 and 11.

Goldberg does not cure the deficiencies of Qarni, and likewise does not teach or

suggest each and every element or limitation of claims 5, 10, and 11. The Examiner has

cited Goldberg for allegedly teaching reducing packet overhead. However, Goldberg

also does not teach "transmitting a check sequence packet" or a "parity system," as recited in claims 5, 10, and 11.

Accordingly, Applicant does not believe that Goldberg and Qarni, alone or taken together, teaches or suggests each and every feature of the claimed invention. Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of claims 5, 10, and 11, and allowance thereof.

c.   *Claims 16 and 17*

The Examiner has rejected claims 16 and 17 as allegedly being obvious over Qarni in view of Goldberg in further view of Borella. Applicant respectfully traverses this rejection.

As discussed above, Qarni and Goldberg does not teach or suggest, alone or in combination, "transmitting a check sequence data packet," as recited in claim 16, or a parity system as recited in claim 17. Borella does not cure the defects of Qarni or Goldberg, and likewise does not teach or suggest each and every feature of claims 16 and 17. The Examiner has cited Borella for allegedly teaching a tradeoff between increased tolerance to loss and bandwidth. However, Borella also does not teach "transmitting a check sequence packet" or a "parity system," as recited in claims 16 and 17.

Accordingly, Applicant does not believe that Goldberg, Qarni, and Borella, alone or taken together, teaches or suggests each and every feature of the claimed invention. Applicant respectfully requests reconsideration and withdrawal of the Examiner's rejection of claims 16 and 17, and allowance thereof.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Kendrick P. Patterson
Attorney for Applicant
Registration No. 45,321

Date: 4-16-2003

1100 New York Avenue, N.W.
Suite 800
Washington, D.C. 20005-3934
(202) 371-2600